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February 4, 2013

Reference No. 056394-06

Ms. Sheila Desai Remedial Project Manager United States Environmental Protection Agency – Region 5 77 West Jackson Boulevard (SR – 6J) Chicago, Illinois 60604 – 3590

Dear Ms. Desai:

Re: Responses to U.S. EPA Comments

Remedial Investigation Report, Revision 2

Former Plainwell, Inc. Mill Property Operable Unit No. 7

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site

Allegan and Kalamazoo County

Conestoga-Rovers & Associates (CRA) has prepared this letter, on behalf of the Weyerhaeuser Company (Weyerhaeuser), in response to the January 3, 2013 United States Environmental Protection Agency's (U.S. EPA's) comments on the Remedial Investigation (RI) Report, Revision 2 for the former Plainwell, Inc. Mill Property (Site), which was submitted to the U.S. EPA on October 19, 2012.

The revised RI Report (Revision 2) was submitted in accordance with the RI/Feasibility Study (FS) Work Plan dated July 2009, the Multi-Area Quality Assurance Project Plan (QAPP) dated September 23, 2009, the Multi-Area Field Sampling Plan (FSP) dated November 2009, the Phase II RI Work Plan dated November 2009, the Statement of Work (SOW) for the RI/FS, and the terms of the Consent Decree for the Design and Implementation of Certain Response Actions at Operable Unit #4 and the Plainwell, Inc Mill Property of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (Consent Decree), which became effective February 22, 2005.

The following presents responses to the U.S. EPA's comments consistent with the revisions to the RI Report (Revision 2) dated October 19, 2012.

Equal Employment Opportunity Employer



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### **GENERAL REPORT COMMENTS**

## **U.S. EPA Comment #1**

The executive summary does not discuss PCBs in soil in the MW-16 area and does not mention the underground tanks encountered at the sludge dewatering building. In addition, the executive summary and Section 5 of the report should discuss the product encountered in the AST delivery line during redevelopment activities.

### Response

The Executive Summary of the report has been revised to include references to the PCBs identified in soil in the area around MW-16.

The Executive Summary and Section 5 of the report have been revised to include a discussion of the below grade structures encountered beneath the area to the west of the former Sludge Dewatering Building and the oil observed within the former No. 6 fuel oil aboveground storage tank (AST) piping during decommissioning and demolition activities that were conducted in this area.

#### **U.S. EPA Report Comment #2**

Section 5.2.4, Page 84, Paragraph 2: The text should refer to the actual figure numbers for the figures used to compare pre- and post-sewer line installation groundwater flow patterns. In addition, Figure 5.1.2 says "proposed storm sewer" in the legend and the figure should show the actual as-built locations, if available.

# Response

The text of Section 5.2.4 has been modified to include a reference to the groundwater contour maps utilized during the comparison to pre- and post-sewer line installation activities.

Figure 5.12 has been modified to show the "approximate storm sewer" lines based on drawings showing the proposed sewer locations and locations observed in the field. Drawings provided by the Michigan Department of Transportation (MDOT) are included in Appendix E to the revised RI Report. Final as-built drawings were not available for inclusion in the report.



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# **U.S. EPA Report Comment #3**

Section 5.4.8, Page 177, Paragraph 3: The text discusses the fuel oil observed in the coal tunnel. The previous section (Section 5.4.7) states that fuel oil releases to the Number 6 Fuel Oil AST Area "have been documented historically". The text should also include a discussion of the fuel oil encountered in the AST delivery line during the August 2012 redevelopment activities and show the location of the delivery line on a figure. In particular, the text should discuss whether fuel oil releases are isolated or whether a larger area of impacts exists extending from the AST to the coal tunnel and along the delivery line to the former Plainwell Mill building.

### Response

Sections 5.4.7 and 5.4.8 have been modified to include a discussion of the observations and actions taken related to the presence of product in the below grade fuel oil delivery system piping during the 2012 redevelopment activities. The approximate locations of the below grade product delivery system lines are shown on Figure 5.7 and on a historical figure presented in Appendix E of the revised RI Report.

#### **HUMAN HEALTH RISK ASSESSMENT COMMENTS**

### U.S. EPA Comment #1

The response to EPA HHRA General Comment #4, states that Section 8.1.5.4 has been revised to "summarize the segregated hazards as appropriate ...". Section 8.1.5.4 has been revised to discuss the basic hazard segregation process and to identify for each exposure area those toxicity endpoints (target organs) associated with cumulative hazard indices (HI) >1 and the associated chemicals of potential concern (COPC). However, the numeric value of each cumulative HI is not identified, nor is the maximum cumulative HI identified. This information is presented in the associated "Risk Assessment Guidance for Superfund" (RAGS) Part D tables in Appendix I and should be presented also in the text. (Note: the incomplete discussion/presentation of segregated hazard results also impacts Section 10.1.3 with regard to EPA HHRA Specific Comment #15 and the executive summary with regard to EPA HHRA General Comment #1).

# Response

Sections 8.1.5.4 and 10.1.3 have been modified to include the requested information. The Executive Summary presents conclusions identified for each redevelopment area by individual media type (i.e., soil and groundwater) and not for combined media; therefore, the segregated hazards (based on a combination of soil and groundwater cumulative HI) have not been included in this section.



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### U.S. EPA Comment #2

The executive summary, Section 8.0 (Baseline Human Health Risk Assessment), and Section 10.0 (including Section 10.1.3 [Human Health Risk Assessment]) do not identify or discuss the impacts of the Michigan Department of Transportation (MDOT) and Michigan Gas Utilities (MGU) utility line installations completed in 2012. Section 5.2.4 of the Revised (Revision 2) RI report has been revised to discuss these installations. However, this section-specific discussion should be summarized or at least referenced elsewhere in the RI, including the HHRA.

# Response

The Executive Summary, Section 8.0 and Section 10.0 have been modified to include references to the MDOT and Michigan Gas Utilities utility line installations conducted in 2012.

#### U.S. EPA Comment #3

Based on a spot check of the transfer of the RAGS D exposure area - and receptor-specific risk and hazard calculations to the text, a single error was identified. Specifically, in Section 8.1.5.6.2, in the in-text table for the future resident - "disturbed" soil exposure scenario, the cumulative hazard quotient (HQ) for iron in groundwater is presented as "2.0E+01". However, the correct value is "2.0E+00" as presented in the referenced RAGS D Table 1.2.46.RME. This single error indicates that there may be other errors, albeit likely a small number, within HHRA results not addressed in the limited spot-check. Section 8.0, in particular Section 8.1.5.6, should be closely reviewed and the current results verified or corrected as needed.

#### Response

The cumulative hazard quotient (HQ) for iron in groundwater has been corrected to be 2.0E+00, consistent with Table 1.2.46.RME. A review and comparison of the values presented in Appendix I have been made to the tables within Section 8.0. Revisions have been made to Section 8.0, as necessary.



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#### SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT COMMENTS

## U.S. EPA Comment #1

Section 9.0, Page 315, Paragraph 2: The text states Section 9.4 summarizes the constituents identified as chemicals of potential ecological concern (COPEC) - it should reference Section 9.3, and it should also state that Section 9.4 summarizes the uncertainties associated with the SLERA.

#### Response

The text of Section 9.0 has been revised as noted in the comment.

#### U.S. EPA Comment #2

Section 9.2.2.7, Page 340, Paragraph 2: This paragraph identifies all COPECs with a screening quotient (SQ) greater than 1 and states the SQ for chromium is 1.1, while Table J6 and the previous paragraph identified the SQ for chromium as 0.5. The reference to chromium should be removed from this paragraph.

#### Response

The text of Section 9.2.2.7 has been revised as noted in the comment.

#### U.S. EPA Comment #3

Section 9.2.2.8, Page 342, Paragraph 5: The text identifies an SQ for chromium as 2.5, while Table J6 identifies the SQ as 3.3; the text must be revised to be consistent with the table.

# Response

The text of Section 9.2.2.8 has been revised as noted in the comment.

#### U.S. EPA Comment #4

Section 9.2.2.9, Page 344, Paragraph 5: The text identifies the SQs for copper as 71 and iron as 129, while Table J6 identifies the SQs for copper as 1.1 and iron as 71; the text must be revised to be consistent with the table.



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# Response

The text of Section 9.2.2.9 has been revised as noted in the comment.

## U.S. EPA Comment #5

Section 9.2.2.10, Page 346, Paragraph 4: This paragraph identifies all COPECs with a SQ greater than 1 and states the SQ for chromium is 1.1, while Table J6 and the previous paragraph identified the SQ for chromium as 0.54. The reference to chromium should be removed from this paragraph.

### Response

The text of Section 9.2.2.10 has been revised as noted in the comment.

### **U.S. EPA Comment #6**

Section 9.2.2.11, Page 348, Paragraph 5: This paragraph identifies all COPECs with a SQ greater than 1 and states the SQ for arsenic is 1.1, while Table J6 identified the SQ as 1.0. The reference to arsenic should be removed from this paragraph and discussed in the previous paragraph.

# Response

The text of Section 9.2.2.11 has been revised as noted in the comment.

#### U.S. EPA Comment #7

Section 9.2.2.12, Page 351, Paragraph 3: To be consistent with the presentations within this section, this paragraph should have the heading "Ecological Considerations" inserted at the beginning.

#### Response

The heading within Section 9.2.2.12 has been revised as noted in the comment.



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# **U.S. EPA Comment #8**

Section 10.1.4, Page 374, Paragraph 2: The text identities eight volatile organic compounds as COPECs, and "al,3,5-trimethylbenzene," should be "1,3,5-trimethylbenzene."

## Response

The text of Section 10.1.4 has been revised as noted in the comment.

Should you have any questions with regard to this letter, please do not hesitate to contact the undersigned.

Yours truly,

**CONESTOGA-ROVERS & ASSOCIATES** 

Gregory A. Carli, P. E.

JQ/ejh/25/Pwl.

Encl.

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